WHO I AM

➢ Cyber Security Professional for 9+ years

➢ Malwares / Operating Systems Internals Specialist

➢ Lecturer in Computer Security

➢ Law Student

THE WORLD AFTER STUXNET

Source: https://apt.securelist.com

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CYBER SECURITY SKILLS SHORTAGE

➤ Not enough Cybersecurity Professionals

Cisco *2014* Annual Security Report, more than *1 million positions*
for security professionals remain unfilled around the world.

ISACA and RSA conference 2016 State of Cybersecurity:

2 million Global shortage of cybersecurity professionals by *2019*

CYBER SECURITY SKILLS SHORTAGE

➢ Applicants are not qualified

84%
ORGANIZATIONS BELIEVE HALF OR FEWER OF APPLICANTS FOR **OPEN SECURITY JOBS ARE QUALIFIED**[9]

53%
OF ORGANIZATIONS EXPERIENCE DELAYS AS LONG AS **6 MONTHS TO FIND QUALIFIED SECURITY CANDIDATES**[10]

Source: ISACA State of Security implications for 2015

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CYBERSECURITY NEXUS

6

NEW CYBER SECURITY JOBS

Old

- ✓ Security Administrator
- ✓ Security Manager
- ✓ Security Engineer
- ✓ Penetration Tester
- ✓ Security Auditor

New

- ➢ Security Operation Center Analysts ?
- ➢ Security Architect ?
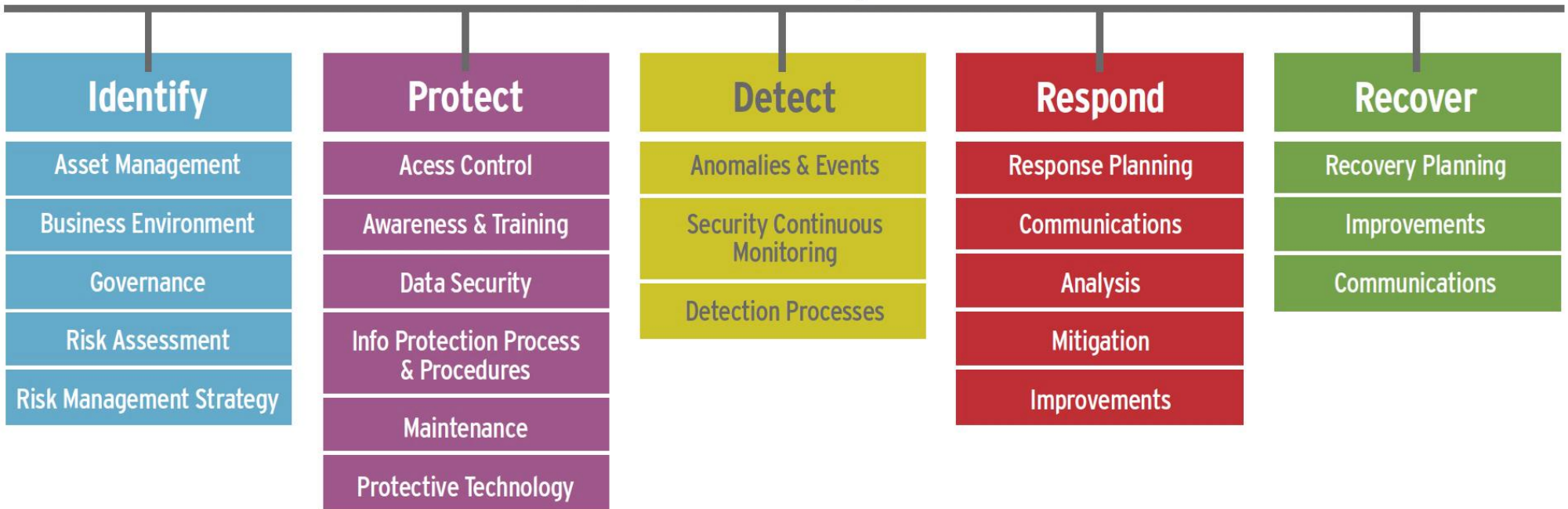- ➢ Threat Intelligence Analyst ?

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LET'S SUM UP

➤ Information System have become a Battlefield

➤ Don't have enough Cybersecuirty Professional.

➤ Cybersecurity professionals don't have the right skills

➤ Few or no Cybersecurity courses in the Academia

✓ Need a new curriculum

✓ For Academia and the Industry

✓ Validate the real technical level

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NIST CYBER SECURITY FRAMEWORK

Identify
- Asset Management
- Business Environment
- Governance
- Risk Assessment
- Risk Management Strategy

Protect
- Acess Control
- Awareness & Training
- Data Security
- Info Protection Process & Procedures
- Maintenance
- Protective Technology

Detect
- Anomalies & Events
- Security Continuous Monitoring
- Detection Processes

Respond
- Response Planning
- Communications
- Analysis
- Mitigation
- Improvements

Recover
- Recovery Planning
- Improvements
- Communications

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CYBER SECURITY NEXUS PATHWAY

✓ Use vulnerability assessment processes and scanning tool ……

✓ Implement specified cybersecurity controls – for network, application, endpoint, server……

✓ Identify anomalous activity and potential internal ……

✓ Perform initial attack analysis to determine the attack vectors, targets and scope and potential impact.

✓ Execute defined response plans to contain damage on affected assets.

✓ ……………
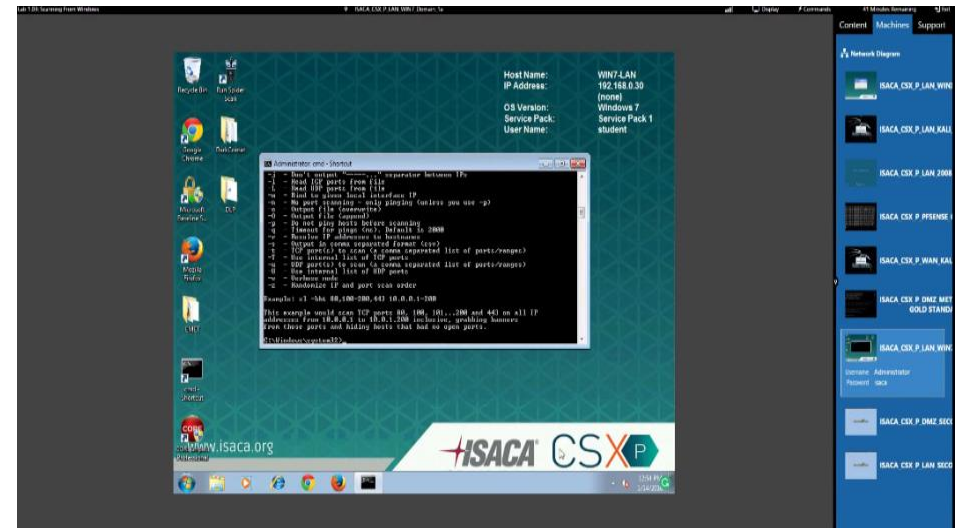
CSX CERTIFICATIONS ARE…

✓ New Curriculum adapted to well recognized Cyber Security Best Practices and Frameworks (NIST)

✓ Performance Based Exams to test real world performance

CSX BY ISACA